

Radar Sensoren  
 Radar sensors  
 Détecteurs à radar

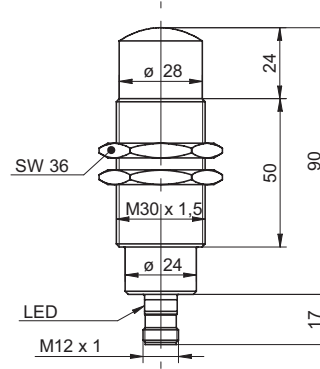
# RR30.DA00-11221320

Radar Distanz messende Sensoren

Radar distance measuring sensors

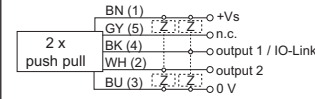
Détecteurs de mesure de distances

## Abmessungen Dimensions Dimensions

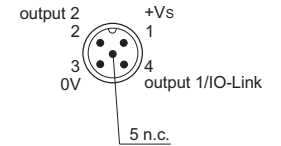


- Alle Masse in mm
- All dimensions in mm
- Toutes les dimensions en mm

## Elektrischer Anschluss Connection diagram Schéma de raccordement



BN = Braun/brown/brun  
 BK = Schwarz/black/noir  
 WH = Weiss/white/blanc  
 BU = Blau/blue/bleu  
 GY = Grau/gray/gris



Class 2, UL 1310, siehe / see / voir au FAQ

- Vor dem Anschliessen des Sensors die Anlage spannungsfrei schalten.
- Disconnect power before connecting the sensor.
- Mettre l'installation hors tension avant le raccordement du détecteur.



11221320

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### Technische Daten

Erfassungsbereich Sd	0,5 ... 60 m
Temperaturdrift	< ± 10 mm
Betriebsspannungsbereich +Vs <sup>2)</sup>	12 ... 30 VDC
Stromaufnahme max. (ohne Last)	200 mA
Ausgangsstrom	< 100mA (Ausgang 1) < 50mA (Ausgang 2)
Ausgangsschaltung	Gegentakt / IO-Link
Kurzschlussfest	ja
Verpolungsfest	ja, Vs zu GND
Arbeitstemperatur	-40 ... +65 °C
Lagertemperatur	-40 ... +85 °C
Schutzart	IP 68/69K & proTect+

<sup>2)</sup> mit / with / avec IO-Link 18 ... 28VDC

### Technical data

sensing distance Sd	0,5 ... 60 m
temperature drift	< ± 10 mm
voltage supply range +Vs <sup>2)</sup>	12 ... 30 VDC
current consumption max. (no load)	200 mA
output current	< 100mA (Output 1) < 50mA (Output 2)
output circuit	push-pull / IO-Link
short circuit protection	yes
reverse polarity protection	yes, Vs to GND
operating temperature	-40 ... +65 °C
storage temperature	-40 ... +85 °C
protection class	IP 68/69K & proTect+

### Données techniques

Portée de détection Sd	0,5 ... 60 m
Dérive en température	< ± 10 mm
Plage de tension +Vs <sup>2)</sup>	12 ... 30 VDC
Consommation max. (sans charge)	200 mA
Courant de sortie	< 100mA (Sortie 1) < 50mA (Sortie 2)
Circuit de sortie	push-pull / IO-Link
Protégé contre courts-circuits	oui
Protégé contre inversion polarité	oui, Vs vers GND
Température de fonctionnement	-40 ... +65 °C
Température de stockage	-40 ... +85 °C
Classe de protection	IP 68/69K & proTect+

### FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTICE: Changes or modifications made to this equipment not expressly approved by Baumer may void the FCC authorization to operate this equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Radiofrequency radiation exposure Information: This equipment complies with FCC exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### Canada Compliance Statement

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

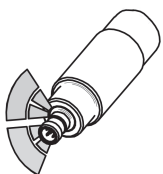
Operation of RR30 sensors on board an aircraft or a satellite is prohibited. The sensor should not point towards the sky in normal operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement. Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps. Ce transmetteur ne doit pas être placé au même endroit ou utilisé simultanément avec un autre transmetteur ou antenne.

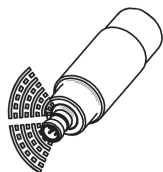
L'opération des capteurs RR30 à bord d'un aéronef ou d'un satellite est interdite. Le capteur ne doit pas pointer vers le ciel en opération normale.

# RR30.DAO0-11221320

## Blinkmodi Flashing modes Modes de clignotement



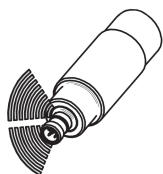
Blinken 1 Hz  
Flashing 1 Hz  
Clignotement 1 Hz



Blinken 4 Hz  
Flashing 4 Hz  
Clignotement 4 Hz

## Farben LED Colors LED Couleurs LED

Gelb/Grün  
Yellow/Green  
Jaune/Vert



## LED Anzeigen LED indication Indication LED

**Grün leuchtet:** Betriebsspannung liegt an  
**Grün blinkt mit 1Hz:** Kurzschluss am Schaltausgang

**Gelb leuchtet:** Ausgangsanzeige  
**Gelb blinkt mit 4 Hz:** Stärke des empfangenen Signals ist grenzwertig, Ausgang unverändert

**Beide LED blinken mit 4Hz:** FindMe aktiviert (über IO-Link)

**Green is lit:** power is on  
**Green flashes with 1Hz:** short-circuit at voltage output

**Yellow is lit:** output indicator  
**Yellow flashes with 4 Hz:** Amplitude of signal is at the lower limit, the output is not changed

**Both LED flashes with 4Hz:** FindMe activated (via IO-Link)

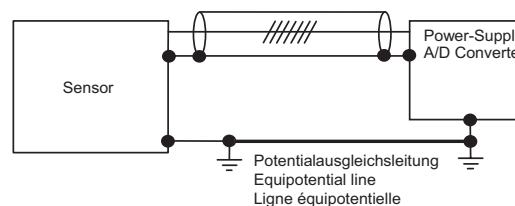
**Vert allumé:** présence d'une alimentation électrique  
**Vert clignotant à 1Hz:** court-circuit sur la sortie de commutation

**Jaune allumé:** indicateur de sortie  
**Jaune clignotant à 4 Hz:** l'intensité du signal reçu est limitée, sortie inchangée

**Les deux LED clignotant à 4Hz:** FindMe activé (via IO-Link)

## Erdungskonzept Grounding concept Concept mise à la terre

In Umgebungen mit starken elektromagnetischen Feldern wird ein geschirmtes Anschlusskabel mit obigem Erdungskonzept empfohlen.



In environments with strong electromagnetic fields is recommended a shielded cable with grounding concept as above.

Dans les environnements à fort champ électromagnétique est recommandé un câble blindé avec le concept de mise à la terre.

## Konfiguration über IO-Link IO-Link configuration Configuration via IO-Link

<https://www.baumer.com/PID/11221320>

Die Anleitung für die Protokoll Struktur und die Befehle sowie die dazu passende IODD sind online als Download hinterlegt

The instructions for the protocol structure and the commands as well as the matching IODD are available online as downloads

Les instructions relatives à la structure du protocole et aux commandes, ainsi que l'IODD correspondant, sont disponibles en ligne sous forme de téléchargements.

## FAQ

### • Wie empfindlich ist der Sensor auf ein Verkippen eines Objekts?

Die Empfindlichkeit gegen Verkippen eines Objekts ist abhängig von der Objektgeometrie und der Position, an der ein Objekt erkannt werden soll. Ein Verkippen kleiner als 3° toleriert der Sensor unter den meisten Bedingungen.

### • Netzteil nach UL 1310, Class 2?

Die Empfindlichkeit gegen Verkippen eines Objekts ist abhängig von der Objektgeometrie und der Position, an der ein Objekt erkannt werden soll. Ein Verkippen kleiner als 3° toleriert der Sensor unter den meisten Bedingungen.

### • Ist ein geschirmtes Anschlusskabel zu verwenden?

In Umgebungen mit starken elektromagnetischen Feldern wird ein geschirmtes Anschlusskabel empfohlen.

### • How sensitive is the sensor towards tilting of an object?

The sensitivity of tilting an object is dependent on the geometry of the object and the position at which the object shall be detected. A tilt angle smaller than 3° can be tolerated by the sensor in most of the cases.

### • Voltage supply according UL 1310, Class2?

The sensitivity of tilting an object is dependent on the geometry of the object and the position at which the object shall be detected. A tilt angle smaller than 3° can be tolerated by the sensor in most of the cases.

### • Is a shielded cable to use?

In environments with strong electromagnetic fields is recommended a shielded cable with.

### • Quel est le degré de sensibilité d'un capteur en cas de renversement d'un objet ?

The sensitivity of tilting an object is dependent on the geometry of the object and the position at which the object shall be detected. A tilt angle smaller than 3° can be tolerated by the sensor in most of the cases.

### • L'alimentation utilisée, couvre la classe 2 selon la norme UL 1310 ?

The sensitivity of tilting an object is dependent on the geometry of the object and the position at which the object shall be detected. A tilt angle smaller than 3° can be tolerated by the sensor in most of the cases.

### • Est un câble blindé utiliser ?

In environments with strong electromagnetic fields is recommended a shielded cable with.